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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,264

04/27/2006

Francois Alwyn Joubert

511-71

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7590

07/03/2008

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EXAMINER

WEBER, JONATHAN C

ART UNIT

PAPER NUMBER

4174

MAIL DATE

DELIVERY MODE

07/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,264	Applicant(s) JOUBERT, FRANCOIS ALWYN	
	Examiner Jonathan C. Weber	Art Unit 4174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 19-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 13-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>28 December 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-18 and withdrawal of claims 19-22 in the reply filed on 28 May 2008 is acknowledged.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. If applicant desires to claim the benefit of a prior-filed application under 35 U.S.C. 119(e), a specific reference to the prior-filed application in compliance with 37 CFR 1.78(a) must be included in the first sentence(s) of the specification following the title or in an application data sheet. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications.

If the instant application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the

application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge

under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 28 December 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

1. Claims 13 & 15 are objected to because of the following informalities:

Claim 13, "where it is retained" should be changed to "where the first chain-retaining device is retained"

Claim 15, "devices are each be provided" should be changed to "devices are each provided"

Appropriate correction is suggested.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 8-12, & 18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 889,321 issued to Meigs et al (Meigs).

Regarding claim 1, Meigs discloses an ammunition loading assembly for loading a projectile into a barrel of a gun (In view of Figure 1), comprising an urging member (13, Figure 1) for urging the projectile into the said barrel (It is understood that a "rammer" performs this function); and drive means (19 & 20, Figure 1) for driving the urging member between a projectile receiving position outside the barrel and a projectile delivery position inside the chamber of the gun (Col. 1, Lines 49-54 & Col. 2, Lines 55-72, the purpose of a "rammer" is to load a projectile or other elements into the barrel of a gun), towards the proximate end of the barrel (10, Figure 1), the drive means including a drive chain assembly (In view of Figure 1, 16), connected to the urging member (In view of Figure 1, elements 16 are connected to element 13) for driving the urging member between the said projectile receiving and delivery positions (In view of Figure 1, it is understood that the loading assembly moves the projectile between receiving and delivery positions).

Regarding claim 2, Meigs discloses an ammunition loading assembly which further includes a magazine for storing the drive chain assembly when the urging member is in the projectile receiving position (11 & 12, Figure 1, the chain is stowed in the channel provided when not extended).

Regarding claim 3, Meigs discloses an ammunition loading assembly wherein the drive chain assembly is rigid in all directions but one, the arrangement being such that the drive chain assembly pushes the urging member from the projectile receiving position to the projectile delivery position and pulls the urging member from the projectile deliver position to the projectile receiving position (Col. 2, Lines 64-72).

Regarding claim 4, Meigs discloses an ammunition loading assembly wherein the magazine defines a curvilinear track along which the drive chain assembly moves when moving the urging member between the projectile delivery position and the projectile receiving position (11 & 12, Figure 1, Col. 1 & 2, Lines 38-41 & 96-100, respectively).

Regarding claim 8, Meigs discloses an ammunition loading assembly wherein the drive chain assembly is constituted of a plurality of chain links pivotally connected to each other (16, Figure 1); and wherein each chain link is provided with a retaining block for abutting the retaining block of a consecutive chain link for rigidising the drive chain assembly in all directions but one (14, Figure 1, when two links abut, the chain is rigidised in all directions save one, Col. 2, Lines 64-66), and the arrangement being such that when the drive chain assembly is bent in the said one direction, the retaining blocks are displaced from each other (In view of Figure 2, Links 16 are shown with retaining blocks 14 which spread apart when the chain is bent about the sprocket wheel

18), and when the drive chain assembly is in a linear configuration, adjacent retaining blocks abut each other to limit bending of the drive chain assembly in all but said one direction (In view of Figure 2, adjacent retaining blocks 14 abut each other and limit bending).

Regarding claim 9, Meigs discloses an ammunition loading assembly according to claim 8 wherein the configuration of the retaining blocks is such that, when the blocks abut each other, the drive chain assembly extends in a loose curve, the arrangement being further such that the drive chain assembly is stressed by straightening the curve (In view of Figure 2, it is understood that the drive chain assembly is stressed by straightening the curve).

Regarding claim 10, Meigs discloses an ammunition loading assembly wherein the retaining blocks each comprises a base for connecting to a chain link (14, connects to links 16, Figures 1 & 2) and two abutment faces extending upwardly from the base (17, Figure 2), the configuration being such that the angle between the base and each abutment face is marginally greater than 90 degrees (The angle between the base and each abutment face appears to be greater than 90 degrees).

Regarding claim 11, Meigs discloses an ammunition loading assembly wherein the drive means includes a drive motor for driving the drive chain assembly (Col. 2, Lines 70-72, 19, Figures 1 & 2).

Regarding claim 12, Meigs discloses an ammunition loading assembly wherein the drive motor includes a drive sprocket wheel for engaging the links of the drive chain assembly (Col. 2, Lines 67-70, 18, Figure 2).

Regarding claim 18, Meigs discloses a gun including an ammunition loading assembly according to claim 1 (In view of Figure 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 889,321 issued to Meigs et al (Meigs).

Regarding claim 5, Meigs discloses the claimed invention except for the material properties of the track for the chain assembly. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create an ammunition loading assembly wherein the magazine includes a polymeric body defining the track and which is covered by metal cover plates defining an outlet for the chain assembly to reduce the weight of the overall structure and provide a strong interaction face between the chain and the magazine, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 6, Meigs discloses the claimed invention except for the material properties of the track for the chain assembly. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use polypropylene

for the magazine body, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 7, Meigs discloses the claimed invention except for the material properties and specific details of the magazine track. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use metal reinforcing members having curved chain guiding faces located at corners of the track, for guiding the inner end of the drive chain assembly around such corners to provide additional strength to known fatigue points and help facilitate bending the chain around the aforementioned corners, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Allowable Subject Matter

5. Claims 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matthews (USPN 682,100) – Mechanical Rammer

Art Unit: 2885

Schneider (USPN 800,021) – Apparatus for Loading Ordnance

Meigs et al (USPN 804,243) – Rammer for Guns

Meigs et al (USPN 925,819) – Rammer for Guns

Krone (USPN 932,034) – Articulated Chain

Vogeler (USPN 987,513) – Chain Rammer

Nelson et al (USPN 3,727,515) – Parallel Chain Drive Device

Hayes et al (USPN 3,742,775) – Stiff Back Roller Chain Device

Goodell et al (USPN 4,719,840) – Stiff-backed Ramming Chain

Pehker (USPN 5,277,097) – Chain Rammer

Baus et al (USPN 6,467,389) – Artillery-Shell Rammer

Stalhandske et al (USPN 6,772,669) – Method and Arrangement for Loading Artillery Pieces by Means of Flick Ramming

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan C. Weber whose telephone number is (571)270-5377. The examiner can normally be reached on Monday-Friday 8:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly D. Nguyen can be reached on (571)272-2402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2885

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. C. W./
Examiner, Art Unit 4174

/JACOB CHOI/
Primary Examiner, Art Unit 2885